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# OHIO STATE UNIVERSITY EMERALD ASH BORER OUTREACH TEAM

# **Emerald Ash Borer Diagnostic Check-Off List**

Joseph F. Boggs, Extension Educator and Commercial Horticulture Specialist, Ohio State University South Centers at Piketon

**Daniel A. Herms**, Associate Professor, Department of Entomology, Ohio Agricultural Research and Development Center, and State Specialist, Ohio State University Extension

Amy K. Stone, Extension Educator, Ohio State University Extension, Lucas County, and Ohio State University Emerald Ash Borer Outreach Team Coordinator

The following is a list of signs and symptoms that will be helpful in diagnosing an emerald ash borer (EAB) infestation. It is important to keep in mind that native ash borers are extremely common throughout the state, and that most borer-infested ash trees in Ohio are victims of these native insects.

Thinning canopy and top dieback, leading to the death of the tree within 2-4 years. Unnatural



Healthy ash tree



Thinning canopy and top dieback

Unusual epicormic shoots sprouting from the main trunk and/or from the base of the tree.

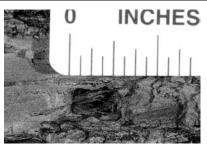


Epicormic basal shoots

Unusually heavy woodpecker activity on living trees, particularly in the winter.



Woodpecker damage



Woodpecker damage



Downy Woodpecker



**D-shaped** Thin, relatively short emergence holes (2-5 inches long) vertical through the bark, splits through the bark one-eighth of an of living trees (with inch in diameter: galleries beneath). This symptom is very clear—EAB exit holes are D-shaped exit holes very distinct. If there is any doubt as to whether the holes are D-shaped, then it is not EAB. Exit holes of native borers are either round or oval and much larger in diameter (one-fourth of an inch Vertical splits in bark or greater). Galleries are tightly Legless, packed with fine frass flattened, heavily (a mix of sawdust segmented, white and excrement). to cream-colored They do not extend larvae (1 inch into the sapwood, as in length when do those produced mature) found by the common beneath the bark native clearwing or of living trees: roundheaded borers Each larval that infest ash. segment is almost EAB larva bell-shaped. Their Galleries filled with frass long and narrow shape, flattened appearance, and distinct segmentation cause the larvae to resemble small tapeworms.

## **Reporting Suspected EAB Infestations:**

Serpentine galleries

The Ohio Department of Agriculture (ODA) should be notified if this diagnostic check-off list provides strong evidence that an EAB infestation has been found. Strong evidence means that signs and symptoms specific to EAB were observed, including D-shaped emergence holes and serpentine galleries under the bark. An EAB diagnosis is not supported if the only signs and symptoms observed are those that can also be associated with other ash problems.

#### **Contact Information for ODA:**

EAB Hotline: 1-888-OHIO-EAB (1-888-644-6322) Web: http://www.ohioagriculture.gov/eab/

### Mailing address:

Ohio Department of Agriculture Plant Pest Control Section Attn.: EAB 8995 East Main Street Reynoldsburg, OH 43068